

July 20, 2010

Ms. Jocelyn Boyd, Esquire Interim Chief Clerk and Administrator South Carolina Public Service Commission Post Office Drawer 11649 Columbia, South Carolina 29211

Re:

Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.

Power Plant Performance Report

Docket No. 2006-224-E

Dear Ms. Boyd:

Enclosed is the Power Plant Performance Report for Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. for the month of June 2010.

Sincerely,

Len S. Anthony (by due)

General Counsel

Progress Energy Carolinas, Inc.

LSA/dhs Attachment 45612

c:

John Flitter (ORS)

The following units had no off-line outages during the month of June:

Brunswick Unit 1 Brunswick Unit 2 Harris Unit 1 Mayo Unit 1 Roxboro Unit 3 Roxboro Unit 4

Full Scheduled Outage

- A. <u>Duration:</u> The unit began a refueling outage at 0:00 on April 17, and remained offline for the remainder of the month. The unit was offline for 720 hours during the month of June.
- B. Cause: Scheduled Refueling Outage
- C. <u>Explanation</u>: The unit transitioned to a scheduled refueling outage on April 17, following a forced outage related to a fire associated with the 4-kV power supply to non-vital bus 5. In addition to refueling, required maintenance and inspections are being conducted during the outage.
- D. <u>Corrective Action:</u> Planned outage activities, including refueling, inspections, repairs to the 4-kV busses and electrical components damaged by the fire, and other maintenance activities, were in progress at the end of June.

Roxboro Unit 2

Full Forced Outage

- A. <u>Duration:</u> The unit was taken out of service at 6:15 on June 24, and was returned to service at 20:54 on June 27, a duration of 86 hours and 39 minutes.
- B. Cause: Waterwall Tube Leak
- C. <u>Explanation</u>: The unit was taken out of service to investigate and repair a tube leak in the waterwall section of the boiler.
- D. <u>Corrective Action:</u> Weld repairs were made to correct the tube leak, and the unit was returned to service.

	Month of June 2010		Twelve Month	See Notes*	
MDC	938	MW	950	MW	1
Period Hours	720	HOURS	8,760	HOURS	
Net Generation	677,000	MWH	6,497,134	MWH	2
Capacity Factor	100.24	%	78.06	%	
Equivalent Availability	98.58	%	78.11	%	
Output Factor	100.24	%	98.28	%	
Heat Rate	10,484	BTU/KWH	10,480	BTU/KWH	
	MWH 	% of Possible	MWH 	% of Possible	
Full Scheduled	0	0.00	1,382,550	16.61	3
Partial Scheduled	162	0.02	82,200	0.99	4
Full Forced	0	0.00	329,895	3.96	5
Partial Forced	9,446	1.40	107,496	1.29	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	675,360		8,324,920		8

^{*} See 'Notes for Nuclear Units' filed with the January 2010 report.

^{**} Gross of Power Agency

	Month of June 2010		Twelve Month	Twelve Month Summary		
MDC	920	MW	931	MW	1	
Period Hours	720	HOURS	8,760	HOURS		
Net Generation	666,826	MWH	7,779,800	MWH	2	
Capacity Factor	100.67	%	95.41	%		
Equivalent Availability	100.00	%	94.58	%		
Output Factor	100.67	%	99.56	%		
Heat Rate	10,752	BTU/KWH	10,600	BTU/KWH		
	MWH 	% of Possible	MWH 	% of Possible		
Full Scheduled	0	0.00	107,101	1.31	3	
Partial Scheduled	0	0.00	35,018	0.43	4	
Full Forced	0	0.00	232,840	2.85	5	
Partial Forced	0	0.00	89,686	1.10	6	
Economic Dispatch	0	0.00	0	0.00	7	
Possible MWH	662,400		8,155,560		8	

^{*} See 'Notes for Nuclear Units' filed with the January 2010 report.

^{**} Gross of Power Agency

	Month of June 2010		Twelve Month	Twelve Month Summary		
MDC	900	MW	912	MW	1	
Period Hours	720	HOURS	8,760	HOURS		
Net Generation	654,660	MWH	7,977,749	MWH	2	
Capacity Factor	101.03	%	99.88	%		
Equivalent Availability	100.00	%	98.46	%		
Output Factor	101.03	%	101.22	%		
Heat Rate	10,883	BTU/KWH	10,695	BTU/KWH		
	MWH 	% of Possible	MWH 	% of Possible		
Full Scheduled	0	0.00	0	0.00	3	
Partial Scheduled	0	0.00	9,393	0.12	4	
Full Forced	0	0.00	105,870	1.33	5	
Partial Forced	0	0.00	11,640	0.15	6	
Economic Dispatch	0	0.00	0	0.00	7	
Possible MWH	648,000		7,989,120		8	

^{*} See 'Notes for Nuclear Units' filed with the January 2010 report.

^{**} Gross of Power Agency

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	Month of June 2010		Twelve Month	Twelve Month Summary		
MDC	724	MW	728	MW	1	
Period Hours	720	HOURS	8,760	HOURS		
Net Generation	-1,364	MWH	4,822,600	MWH	2	
Capacity Factor	0.00	%	75.61	%		
Equivalent Availability	0.00	%	73.41	%		
Output Factor	0.00	%	103.00	%		
Heat Rate	0	BTU/KWH	10,660	BTU/KWH		
	MWH 	% of Possible	MWH	% of Possible		
Full Scheduled	521,280	100.00	1,314,624	20.60	3	
Partial Scheduled	0	0.00	6,002	0.09	4	
Full Forced	0	0.00	381,596	5.98	5	
Partial Forced	0	0.00	10,254	0.16	6	
Economic Dispatch	0	0.00	0	0.00	7	
Possible MWH	521,280		6,380,200		8	

^{*} See 'Notes for Nuclear Units' filed with the January 2010 report.

	Month of June 2010		Twelve Month	Twelve Month Summary		
MDC	727	MW	734	MW	1	
Period Hours	720	HOURS	8,760	HOURS		
Net Generation	466,114	MWH	4,666,225	MWH	2	
Capacity Factor	89.05	%	72.55	%		
Equivalent Availability	100.00	%	95.46	%		
Output Factor	89.05	%	78.03	%		
Heat Rate	10,453	BTU/KWH	10,599	BTU/KWH		
	MWH 	% of Possible	MWH 	% of Possible		
Full Scheduled	0	0.00	231,715	3.60	3	
Partial Scheduled	0	0.00	18,959	0.29	4	
Full Forced	0	0.00	5,874	0.09	5	
Partial Forced	25	0.00	33,333	0.52	6	
Economic Dispatch	57,301	10.95	1,475,789	22.95	7	
Possible MWH	523,440		6,431,300		8	

^{*} See 'Notes for Fossil Units' filed with the January 2010 report.

^{**} Gross of Power Agency

	Month of June 2010		Twelve Month	Twelve Month Summary		
MDC	662	MW	665	MW	1	
Period Hours	720	HOURS	8,760	HOURS		
Net Generation	366,341	MWH	3,656,114	MWH	2	
Capacity Factor	76.86	%	62.77	%		
Equivalent Availability	81.93	%	71.87	%		
Output Factor	87.37	%	84.45	%		
Heat Rate	9,024	BTU/KWH	8,999	BTU/KWH		
	MWH 	% of Possible	MWH 	% of Possible		
Full Scheduled	0	0.00	1,254,515	21.54	3	
Partial Scheduled	870	0.18	72,942	1.25	4	
Full Forced	57,362	12.03	220,516	3.79	5	
Partial Forced	27,911	5.86	93,019	1.60	6	
Economic Dispatch	24,156	5.07	526,851	9.04	7	
Possible MWH	476,640		5,825,400		8	

^{*} See 'Notes for Fossil Units' filed with the January 2010 report.

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	Month of June 2010		Twelve Month	See Notes*	
MDC	693	MW	696	MW	1
Period Hours	720	HOURS	8,760	HOURS	
Net Generation	444,458	MWH	4,227,266	MWH	2
Capacity Factor	89.08	%	69.37	%	
Equivalent Availability	99.89	%	93.95	%	
Output Factor	89.08	%	73.15	%	
Heat Rate	10,261	BTU/KWH	10,868	BTU/KWH	
	MWH 	% of Possible	MWH 	% of Possible	
Full Scheduled	0	0.00	314,792	5.17	3
Partial Scheduled	0	0.00	9,096	0.15	4
Full Forced	0	0.00	0	0.00	5
Partial Forced	572	0.11	44,171	0.72	6
Economic Dispatch	53,930	10.81	1,498,583	24.59	7
Possible MWH	498,960		6,094,040		8

^{*} See 'Notes for Fossil Units' filed with the January 2010 report.

	Month of June 2010		Twelve Month	Twelve Month Summary		
MDC	698	MW	702	MW	1	
Period Hours	720	HOURS	8,760	HOURS		
Net Generation	430,778	MWH	4,674,692	MWH	2	
Capacity Factor	85.72	%	75.99	%		
Equivalent Availability	99.93	%	97.60	%		
Output Factor	85.72	%	76.83	%		
Heat Rate	11,695	BTU/KWH	11,871	BTU/KWH		
	MWH	% of Possible	MWH 	% of Possible		
Full Scheduled	0	0.00	24,920	0.41	3	
Partial Scheduled	186	0.04	71,382	1.16	4	
Full Forced	0	0.00	5,596	0.09	5	
Partial Forced	179	0.04	46,491	0.76	6	
Economic Dispatch	71,417	14.21	1,328,826	21.60	7	
Possible MWH	502,560		6,152,440		8	

^{*} See 'Notes for Fossil Units' filed with the January 2010 report.

^{**} Gross of Power Agency

Plant	Unit	Current MW Rating	January 2009 - December 2009	June 2010	January 2010 - June 2010
Asheville	1	191	70.87	80.52	77.85
Asheville	2	185	59.45	79.69	68.46
Cape Fear	5	144	63.73	80.01	77.50
Cape Fear	6	172	62.21	84.53	73.21
Lee	1	74	50.63	82.74	75.52
Lee	2	77	41.80	69.89	60.64
Lee	3	246	58.82	80.44	75.46
Mayo	1	727	62.45	89.05	78.43
Robinson	1	177	61.18	77.68	75.74
Roxboro	1	369	79.40	93.94	81.49
Roxboro	2	662	73.67	76.86	55.49
Roxboro	3	693	62.76	89.08	81.47
Roxboro	4	698	71.40	85.72	79.16
Sutton	1	97	39.14	48.43	54.42
Sutton	2	104	44.65	48.12	55.05
Sutton	3	403	48.01	62.28	59.22
Weatherspoon	1	48	13.92	41.89	44.45
Weatherspoon	2	48	14.93	48.11	36.79
Weatherspoon	3	75	23.59	43.05	57.37
Fossil System Total		5,190	62.52	80.04	71.68
Brunswick	1	938	97.67	100.24	62.27
Brunswick	2	920	79.50	100.67	95.44
Harris	1	900	93.90	101.03	100.30
Robinson Nuclear	2	724	104.08	0.00	48.85
Nuclear System Total		3,482	93.18	79.66	78.03
Total System		8,672	74.79	79.89	74.26

Amended SC Fuel Rule Related to Nuclear Operations

There shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost associated with the operation of its nuclear generation system if the utility achieved a net capacity factor of \geq 92.5% during the 12 month period under review. For the test period March 1, 2010 through June 30, 2010, actual period to date performance is summarized below:

Period to Date: March 1, 2010 to June 30, 2010

Nuclear System Capacity Factor Calculation (Based on net generation)

A Nuclear system actual generation for SCPSC test period	A =	7,251,216 MWH
B. Total number of hours during SCPSC test period	B =	2,927 hours
C. Nuclear system MDC during SCPSC test period (see page 2)	C =	3,482 MW
D. Reasonable nuclear system reductions (see page 2)	D =	3,182,501 MWH
A. SC Fuel Case nuclear system capacity factor: [(A + D) / (B	(+ C)]	* 100 = 102.4%

NOTE:

If Line Item E > 92.5%, presumption of utility's minimum cost of operation. If Line Item E < 92.5%, utility has burden of proof of reasonable operations.

Amended SC Fuel Rule Nuclear System Capacity Factor Calculation Reasonable Nuclear System Reductions

Period to Date: March 1, 2010 to June 30, 2010

Nuclear Unit Name and Designation	BNP Unit # 1	BNP Unit # 2	HNP Unit # 1	RNP Unit # 2	Nuclear System
Unit MDC	938 MW	920 MW	900 MW	724 MW	3,482 MW
Reasonable refueling outage time (MWH)	1,335,783	0	0	1,314,624	
Reasonable maintenance, repair, and equipment replacement outage time (MWH)	92,159	26,110	2,368	349,552	
Reasonable coast down power reductions (MWH)	0	0	0	0	
Reasonable power ascension power reductions (MWH)	55,192	464	0	0	
Prudent NRC required testing outages (MWH)	0	5,650	599	0	
SCPSC identified outages not directly under utility control (MWH)	0	0	0	0	
Acts of Nature reductions (MWH)	0	0	0	0	
Reasonable nuclear reduction due to low system load (MWH)	0	0	0	0	
Unit total excluded MWH	1,483,134	32,224	2,967	1,664,176	
Total reasonable outage time exclusions [carry to Page 1, Line D]					3,182,501